REMARKS

In the Office Action dated June 30, 2008, claims 1-9 18-21, and 23 were rejected under 35 U.S.C. § 101; and claims 1-23 were rejected under 35 U.S.C. § 103(a) as unpatentable over Chaturvedi et al., "Synthetic Economies: The Application of Distributed Interactive Computing Environments for Policy and Management Decision Making," Institute for Defense Analyses (Chaturvedi/IDA) with Mehta, "Simulations in Economics and Management," Communication of the ACM (Chaturvedi/ACM), and further in view of U.S. Patent No. 6,405,173 (Honarvar), P.R. Sugges, "The Use of Computerized Business Games to Simulate Business Behavior Under Different Policies," IEEE 1979 Winter Simulation Conference (Sugges)," and U. Fischbacher, "z-Tree – Zurich Toolbox for Readymade Economic Experiments – Experimenter's Manual," Institute for Empirical Research in Economics (Fischbacher).

Independent claims 1 and 18 have been amended to address the § 101 rejection. Therefore, withdrawal of the § 101 rejection is respectfully requested.

It is respectfully submitted that the § 103 rejection over Chaturvedi/IDA, Chaturvedi/ACM, Honarvar, Sugges, and Fischbacher is defective.

To make a determination under 35 U.S.C. § 103, several basic factual inquiries must be performed, including determining the scope and content of the prior art, and ascertaining the differences between the prior art and the claims at issue. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459 (1965). Moreover, as the U.S. Supreme Court has held, it is important to identify a reason that would have prompted a person of ordinary skill in the art to combine reference teachings in the manner that the claimed invention does. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007).

Here, a comparison of the teachings of the references, even if hypothetically combined, will reveal that the references disclose subject matter that is significantly different from the subject matter of claim 1.

The primary references relied upon by the Office Action include Chaturvedi/IDA and Chaturvedi/ACM, which refer to Synthetic Economy for Analysis and Simulation (SEAS).[1] As noted by Chaturvedi/ACM, "SEAS replicates the real world in most crucial dimensions, ..." Chaturvedi/ACM, page 60. Chaturvedi/ACM states that "SEAS is a distributed, interactive, real-time environment for conducting large-scale experiments and simulations in areas where interactions among agents need to be studied." *Id.* The passage of Chaturvedi/IDA referred to by the Office Action is Appendix A, which refers to a base synthetic economy developed at Purdue University that contains three sectors: industry producers, firms, and households.

As correctly noted by the Office Action, Chaturvedi/ACM and Chaturvedi/IDA do not disclose translating player definitions that define a plurality of players and an associated set of rules defining a possible decision space, a decision-making process tree, an information set, an outcome function, and a payoff function for each player, into at least one codified script that is executed. It is apparent that SEAS as defined by Chaturvedi/ACM and Chaturvedi/IDA uses a **predefined program** (**not** scripts translated from player definitions) that is able to accept different inputs for performing the described simulations.

However, a predefined program also appears to be exactly what the secondary references relied upon by the Office Action teach. The Office Action relied upon Suggcs as disclosing "computerized business games used as a research tool to determine how businesses respond to corporate and government policies in the context of economies," and refers to Fischbacher as disclosing "use of a scripting language in a customizable, interactive computerized business game." 6/30/2008 Office Action at 3, 7-8. The assertion that Fischbacher teaches use of a scripting language in a customizable, interactive computerized business game is **incorrect**. Fischbacher describes a z-Tree program that is designed to enable conducting of economic experiments. Fischbacher, page 5. The z-Tree program includes a server program (z-Tree) and client programs (z-Leaf). The z-Tree server program and the z-Leaf client program of Fischbacher are clearly **predefined programs**, not scripts that can be translated from player

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[1]   The assertion in the Office Action that Mehta (U.S. Patent No. 6,931,365) is a "detailed 'product description' of the earlier disclosed SEAS" in Chaturvedi/IDA and Chaturvedi/ACM is clearly incorrect. The filing date of Mehta's provisional application is December 2000, which is well after the dates of the Chaturvedi references. Thus, it is clear that the subject matter of Mehta constitutes later developed technology not present in SEAS of the earlier Chaturvedi reference.

definitions into at least one codified script, as recited in claim 1. In fact, there is not appearance of the term "script" in Fischbacher.

Similarly, with respect to Sugges, there is absolutely no indication that its computerized business games include codified scripts translated from player definitions. Honarvar, the other reference cited by the Office Action, refers to a decision management system that simulates the effect of a strategy by applying the strategy to a client data, and tracks what type of client traveled through a respective decision point in the strategy during the simulation. Honarvar, Abstract. However, there is no indication that the decision management system of Honarvar is translated from player definitions into a script.

A reference cited by the Office Action that refers to "script" is Jepsen. However, Jepsen describes programming languages **in general**. Page 71 of Jepsen refers to scripting languages. However, nowhere in Jepsen is there any hint that the scripting language described in Jepsen can be translated from player definitions that define a plurality of players and associated set of rules defining a possible decision space, a decision-making process tree, an information set, an outcome funetion, and a payoff function for each player.

The Office Action further argued that "the addition of old and well known scripting methods is precisely the purpose and application of the prior art, in which it is shown that scripting was old and well known to simulation including business and economic simulation." 6/30/2008 Office Action at 3. However, as explained above, this assertion in the Office Action is erroneous. None of the cited references provide any hint of translating player definitions into at least one codified script that is executed, as recited in claim 1. In fact, all the references cited by the Office Action indicate that a **predefined program**, and not scripts translated from player definitions, is used. The only possible reference to scripting language is provided by Jepsen, which refers to scripting language in general. There is no hint given in Jepsen of the subject matter of claim 1, namely of translating player definitions into at least one codified script.

In view of the foregoing, it is clear that even if the references could be hypothetically combined, the hypothetical combination of the references would not have led to the claimed subject matter.

It is clear that the cited references establish that persons of ordinary skill in the art would have used predefined programs to perform simulations of business games, with nothing in the cited references to provide any hint that a person of ordinary skill in the art would have been led to translate player definitions as defined in claim 1 into at least one codified script that is executed.

As explained in the Background section of the present application, a "disadvantage" of conventional systems is "their limited adaptive flexibility." Specification, page 2, lines 20-21. "If a process or policy rule is changed, substantial programming may be required to effect the appropriate change in software code." *Id.*, page 2, lines 21-22. "Generally, the experimenter must choose the individual software package that most closely matches the business processes. Significant policy changes may otherwise require a change of experimental economic simulation software packages." *Id.*, page 2, line 24-page 3, line 4. In contrast, by using the ability of translating player definitions into at least one codified script, as performed by claim 1, enhanced flexibility is provided, which is clearly not hinted anywhere in the cited references.

The cited references would have led a person of ordinary skill in the art to use **predefined** programs to perform simulations, rather than use a codified script translated from player definitions. Thus, it is also clear that a person of ordinary skill in the art would not have been prompted to combine the teachings of the references to achieve the claimed invention.

Independent claims 10 and 18 are similarly allowable over the cited references.

Dependent claims are allowable for at least the same reasons as corresponding independent claims. Moreover, note that dependent claim 4 further recites modifying the associated set of rules for one or more players, and repeating the translating and executing tasks after the modifying. The concept of modifying rules and then repeating the translating of the player definitions into a script according to the modified rules is clearly not a concept contemplated by the cited references, which teach using predefined programs to perform simulations.

Dependent claims 22 and 23 are further allowable for similar reasons as claim 4.

In fact, with respect to claims 22 and 23, the Office Action coneeded that Chaturvedi does not expressly teach modifying the player definitions, and re-translating the player definitions into modified scripts for execution. 6/30/2008 Offiee Action at 10. The Office Aetion argued, however, that "these steps recite merely the effect of re-running a simulation with new players ...." *Id.* The Office Action then concluded that this would have been obvious. However, this statement is bascd on a eonelusory remark by the Office Action, with no support provided regarding how the references would have led a person of ordinary skill in the art to the claimed subject matter.

Therefore, the obviousness rejection of claims 4, 22, and 23 are elearly further defective.

Allowance of all claims is rcspectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpaymcnt to Deposit Account No. 08-2025 (10004567-1).

Respectfully submitted,

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